

THE RELATIONSHIP BETWEEN THE *ASCARIDS* OF MAN, PIG AND CHIMPANZEE

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The material available for examination was :—

- (1) Numerous specimens of *Ascaris lumbricoides* obtained by Dr. J. W. S. Macfie from Asylum patients at Accra.
- (2) Numerous specimens of *Ascaris suilla* from pigs killed in the Liverpool Abattoir.
- (3) A few *Ascarids* obtained from a chimpanzee (*Anthropopithecus* sp.).

Attempts were made to establish any difference especially in regard to the lips, shape of the pulp and number and position of the cephalic papillae. The tails of the male worms were compared

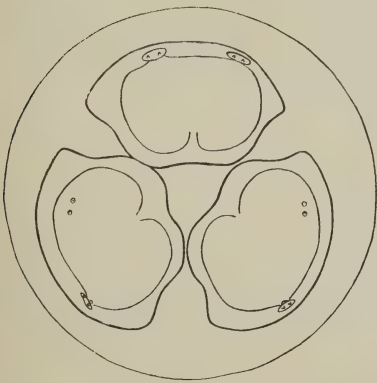


FIG. 1. *Ascaris lumbricoides*. Head, anterior view.

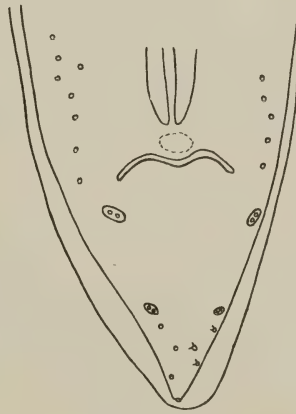


FIG. 2. *Ascaris lumbricoides*. Post-extremity of male, ventral view.

as regards the mode of termination and the number and distribution of the papillae on the ventral surface. The spicules in the male were examined and in the female the position of the genital opening.

On the dorsal lip of the head are two large double papillae; on each of the sub-ventral lips is one large double papillae lying towards the ventral aspect and, more laterally, two small papillae lying close together. This arrangement exists in worms from all three sources. The pulp of the lips appeared to show no difference in the various worms.

The tail of the male terminates in a small mammillate projection. It varies somewhat in shape, but such variations occur not only in worms from different sources, but in worms from the same host. The number and position of the postanal papillae in the male is constant. There are seven pairs, the two anterior being double, and of these the one nearer the cloaca is always the larger. The remaining three pairs are single and arranged on each side in the form of a triangle with the apex directed inwards. Immediately in front of the cloaca is a large cushion-like structure. The preanal papillae are irregular, but in worms from all three sources there are at least 50 pairs. The spicules are broad, flattened dorso-ventrally and non-alate, no differences being found in the worms from the various sources.

Morphologically, then, the *Ascaris* of the pig and of the chimpanzee cannot be distinguished from the *Ascaris* of man, and should, therefore, be designated *Ascaris lumbricoides*, Linn (1758).

These observations agree with those of Baylis and Daubney (1922), who examined and compared the *Ascaris* from man, orang-utan, Indian wild pig and various squirrels.

REFERENCE

- BAYLIS, H. A., and DAUBNEY, R. (1922). Report on the Parasitic Nematodes in the Collection of the Zoological Survey of India. *Mem. Ind. Mus.*, Vol. VII, No. 4, p. 263.